

5. The method of claim 4, wherein the one of the second SoC or the second ASIC is provided access to the camera for applying the second camera setting.

6. The method of claim 4, wherein a first latency parameter is applicable to the first image processing function executed by the first data processing component during processing of a first video feed provided by the camera to the first data processing component, and wherein the frame rate setting of the camera is based at least in part on the first latency parameter.

7. The method of claim 6, wherein a second latency parameter is applicable to the second image processing function executed by the second data processing component during processing of a second video feed provided by the camera to the second data processing component, and wherein the frame rate setting of the camera is based at least in part, on an event wherein the first latency parameter has a higher priority than the second latency parameter.

8. The method of claim 1, wherein the data capture device is one of a camera, a radio detection and ranging (radar) device, or a light detection and ranging (lidar) device, and the method further comprises:

determining the first priority based on at least a safety criterion that is applicable to an occupant of the vehicle; and

determining the second priority based on at least a regulatory criterion that is applicable to the vehicle.

9. A method comprising:

providing a camera in a vehicle;

providing, in the vehicle, a first image processing component configured to perform a first image processing function;

granting to the first image processing component, access to the camera;

applying by the first image processing component, upon the camera, a first camera setting that is matched to the first image processing function; and

performing the first image processing function upon a video feed of the camera.

10. The method of claim 9, further comprising:

providing, in the vehicle, a second image processing component configured to execute a second image processing function;

applying a first priority to the second image processing function;

applying a second priority to the first image processing function, wherein the second priority is lower than the first priority; and

applying, on the basis of the first priority, upon the camera, a second camera setting that is matched to the second image processing function.

11. The method of claim 10, wherein applying the second camera setting upon the camera comprises:

withdrawing grant of access to the camera by the first image processing component;

granting to the second image processing component, access to the camera;

applying by the second image processing component, upon the camera, a second camera setting that is matched to the second image processing function; and performing the second image processing function upon the video feed of the camera.

12. The method of claim 11, wherein the first image processing component is one of a first system-on-a-chip (SoC) or a first application specific integrated circuit (ASIC) and the second image processing component is one of a second SoC or a second ASIC.

13. The method of claim 10, wherein the first camera setting is one of an exposure setting, a frame rate setting, a white balance setting, a lens setting, or a resolution setting.

14. The method of claim 13, wherein a first latency parameter is applicable to the first image processing function executed by the first image processing component during processing of the video feed and wherein the frame rate setting of the camera is based on a time-sharing protocol where the first image processing component and the second image processing component share a camera setting resource to apply the first camera setting and the second camera setting.

15. A system installed in a vehicle, the system comprising:

a camera;

a first image processing component configured to perform a first image processing function upon a video feed of the camera;

a second image processing component configured to perform a second image processing function upon the video feed of the camera; and

an access arbitrator that grants to one of the second image processing component or the first image processing component, access to the camera for applying a camera setting upon the camera.

16. The system of claim 15, wherein the first image processing component is one of a first system-on-a-chip (SoC) or a first application specific integrated circuit (ASIC) and the second image processing component is one of a second SoC or a second ASIC.

17. The system of claim 15, wherein at least a portion of the access arbitrator is provided in one of the camera, the first image processing component, the second image processing component, or in one of a controller device.

18. The system of claim 15, wherein the camera setting is one of an exposure setting, a frame rate setting, a white balance setting, a lens setting, or a resolution setting.

19. The system of claim 18, wherein a first latency parameter is applicable to the first image processing function executed by the first image processing component during processing of the video feed and wherein the frame rate setting of the camera is based at least in part on the first latency parameter.

20. The system of claim 15, wherein the access arbitrator grants access to the camera based on a first priority associated with the first image processing component and a second priority associated with the second image processing component.

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